

FIG. 1

TABLE 1. COMPARATIVE ARCH SHAPE CURVE PROPERTIES

Arch Curve Shape: Table in Fig. 1	Truncated Semi-Ellipse Note (c)	Semi- Ellipse	Parabola	Semi-Circle	
	TSE	SE	P	S	
Width at Base - inches	45.2	45.2	45.2	45.2	
Height at Center -inches	29.6	29.6	29.6	22.6	
<b>Volume Parameter</b>	1013	1039	892	802	Note (b)
Relative comparison	26%	30%	11%	0%	
Relative comparison	0%	+3%	-12%	-21%	
<b>Material Parameter</b>	82	82	78	71	Note (a)
Relative comparison	-15%	-15%	-10%	0%	
Relative comparison	0%	0%	+5%	14%	

Notes:

- (a) Length of the arc curve from base to base
- (b) Area under the arch curve; cross section
- (c) Truncation of semi ellipse is 2.7 inches; chamber height is 44-45% of ellipse major axis

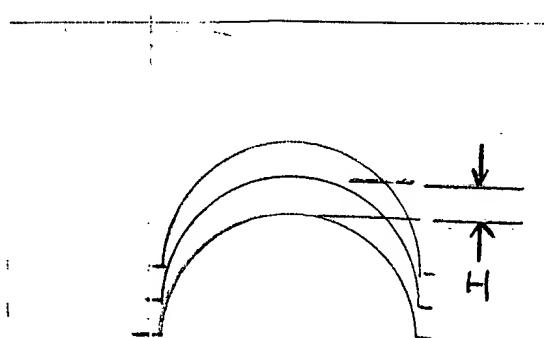


FIG. 2